

Treatment efficacy of Acupuncture, Yoga and Homeopathy in the Indian context: a Review

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ABSTRACT:

In this paper recent research is reviewed on the history, origin and treatment efficacy of alternative or complementary medicines like acupuncture, yoga and homeopathy in the treatment of various physiological, mental and physical conditions. For at least 2,500 years, acupuncture is being a part of traditional Chinese medicine. Recently, people are turning to the acupuncture and other forms of alternative medical treatments. Based on the theory of good flow of Qi through the meridians which is being the basis of good health, acupuncture focuses in restoring the Qi by modifying the two complementary forces i.e., Yin and Yang. Thus, far evidence supports the use of acupuncture in the treatment of various chronic disorders like postoperative nausea and vomiting, pain management, headache, stroke rehabilitation, asthma, cancer, drug abuse, dermatology, AIDS, osteoarthritis, glaucoma, weight management, women's health management, and also as a veterinary medicine. Nowadays many forms of yoga are practiced which include Hatha, Ashtanga, Anasara, Iyengar and Bikram. Studies have shown that yoga can improve several conditions such as anxiety, depression, pain syndromes, sleep, headaches, lower back pain, osteoarthritis, Rheumatoid arthritis, epilepsy, cardiovascular disease, asthma, diabetes, obesity, pregnancy conditions and menopause. Homeopathy was first introduced in India the early 19th century. It was flourished in Bengal at first, and then spread all over India. Homeopathy is used to improve the various conditions anxiety, depression, insomnia, diabetic polyneuropathy, dermatitis, headache, migraine, trigeminal neuralgia, respiratory infections, rheumatic disease, menstrual irregularities, paediatric, and in veterinary practice. An alternative medicine holds the promise of being able to treat certain patients with chronic disease or otherwise difficult-to-treat conditions and to achieve immediate palliative effects with virtually no side effects.

Key words: Treatment efficacy, diseases, Acupuncture, Yoga, Homeopathy, India

INTRODUCTION

Self preservation tendency and curiosity of man provoked and helped him to search remedies from nature for survival and lead to the discoveries of various types of medicine and treatments. From the ancient times, it was believed that the prehistoric men used plants for therapeutic purposes. After so many trials and error methods men had made possible to derive more than hundreds of different treatment options available across the world. The most important and great discoveries of men lead to the birth of alternative medicines. Now a days,

Alternative medicines is a major enterprise in India. Alternative medicines refer to therapeutic practices that are based on natural and traditional methods. Alternative medicines deal with not only the body but, also mind and spirit of the human system. The growing interest in promotion of alternative medicines lead to the aims of the government schemes the National Rural health mission to encourage a healthy

lifestyle and alternative systems of medicines through AYUSH (Ayurveda, yoga, Acupuncture, Unani, Siddha and Homeopathy), the affordability of health care is also a key issue. In November 2009, the Government's ministry of health and family welfare announced the steps it would be taking to promote 'Indian systems of medicines' in the country, including spending Rs 922 crores on the promotion of AYUSH [1]. The National centre for complementary and alternative medicines (NCCAM), a united states government agency dealing with complementary and alternative medicines, has classified the various forms of alternative medicines such as a) Traditional Chinese medicines (TCM) which includes acupuncture , herbal medicines and diet therapy. b) Ayurveda which also consists of various modes of treatment like Yoga, diet, massage and herbal medicines c) Homeopathy [2]. This paper highlights on acupuncture, Yoga and Homeopathy

ACUPUNCTURE

Acupuncture:

The traditional Chinese medicine recognizes acupuncture as a part of traditional system of medicine being followed in past thousand years. In this procedure needle is inserted at particular 350 points of patient's body for 20 minutes in resting condition and then removed. The twirl and manipulation of needle insertion and removal is believed to cure the pain and disease stimulating energy flow in the body. The word acupuncture was coined by a French Jesuits, from the Latin *acus* (needle) and *punctura* (puncture) [4].

In the present scenario of the world there is a dramatically increase in the population in some parts of the world. So, medical advances mean that people are living longer. People nowadays no longer have to be worry about their healthy lives and they also no longer to live with chronic pain and fear of any types of diseases [8]. Acupuncture is the safest technique to treat the very dreadful diseases without any side effects or any unwanted effects. It is very cost effective and a very acceptable technique to treat diseases.

Acupuncture is widely accepted as alternative medicines in all over the world. This is one of the common practices in Chinese and Japanese medicine .It has been used as medicine in china since 1930s. There are different types of acupuncture used in the treatment of different diseases. It is true that acupuncture involves needles being strategically placed on a person's body, so it got its name from Latin. In Latin *acus*, means needle and *pungere* is prick. There are many varieties of acupuncture like French meridian acupuncture, Korean hand acupuncture, auriculotherapy introduced by French physician Dr. Paul Nogier Electro-acupuncture etc [15, 16, 17].

History:

The source of information of original text of Chinese medicines is the *Nei-ching*, the yellow emperor's classic of internal medicine, which is estimated to be at least 2,500 years old. The *Nei Jung* regarded the human body as a miniature representation of the universe as a whole and taught that a state of health could be achieved by balancing the body's internal environment with the external environment of the entire universe.

The first written reference to the use of acupuncture needles was in the fifth century B.C, and the theories underlying acupuncture were underlined 200 and 400 B.C in the yellow emperor's canon of internal medicines. Acupuncture became firmly established as a system of medicines during the Sui dynasty in 589-618 A.D with the foundation of the imperial medical college. Acupuncture first gained wide spread attention in the west in 1970s, after U.S President Richard Nixon's visit to China when a U.S journalist received acupuncture for post-operative discomfort. Since, then it has become a respectable subject for research. A turning point in the introduction of acupuncture in the United States came in 1971. James Reston, a reporter for The New York Times, was in Beijing to report on a ping-pong match between China and the United States. While there, he developed acute appendicitis and required an emergency appendectomy. The report of his firsthand experience with acupuncture for the management of his post-operative pain was published on the front page of The New York Times [10]. This sparked an intense interest in acupuncture by the public. Several months later, a report favorable to acupuncture was published in the Journal of the American Medical Association.

As a part of holistic health movement of the last 25 years, acupuncture and acupressure are increasingly being used in the United States, since, the founding of office of alternative medicines (OAM) at the National Institutes of Health (NIH) in 1992 [11]. The workshop on acupuncture was held in 1994 which was cosponsored by the NIH-OAM and the U.S Food and Drug Administration (FDA). At the end of the workshop it was decided that a citizen's petition would be filed with the FDA, requesting that the agency reclassify acupuncture needles as class-2 (i.e., safe and effective) medical devices [4].

In 1998, the Office of Alternative Medicine was expanded to become the National Center for Complementary and Alternative Medicine (NCCAM). The NCCAM is one of the twenty-seven agencies that are part of the National Institutes of Health. One of NCCAM's major goals is to research and present information on complementary medical systems under rigorous scientific practice. Another first in Medical

Acupuncture occurred in April of 2000, with the establishment of the American Board of Medical Acupuncture [11]. The board offered its first certifying examination for physicians in October 2000, allowing physicians the opportunity to demonstrate proof of proficiency in the specialty of medical acupuncture. Physicians who pass the ABMA certifying examination are referred to as Diplomats of the American Board of Medical Acupuncture (DABMA) and are considered to be board-certified in medical acupuncture [11]. The World Health Organization (WHO) recommends acupuncture as an effective treatment for over forty medical problems, including allergies, respiratory conditions, gastrointestinal disorders, gynecological problems, nervous conditions, and disorders of the eyes, nose and throat, and childhood illnesses and dermatological problems[12]. Acupuncture has been used in the treatment of alcoholism and drug abuse [13]. It is an effective and low-cost treatment for headaches and chronic pain-management, associated with problems like back injuries and arthritis. It has also been used to supplement invasive Western treatments like chemotherapy and surgery. Acupuncture is generally most effective when used as prevention or before a health condition becomes acute, but it has been used to help patients suffering from cancer and AIDS.

Principle and Theory:

Acupuncture represents the Chinese tradition that strives to restore the balance of natural forces called Yin, Yang, Qi and the five elements to cure any type of illness. Internal balance and harmony are the ultimate goals of traditional Chinese medicines. The Chinese system believes that emotions and mental states are every bit as influential on disease as purely physical mechanisms, and considers factors like work, environment, lifestyle and relationships as fundamental to the overall picture of a patient's health. To understand the ideas behind acupuncture, it is worthwhile to introduce some of these basic terms.

Yin, Yang and Chi: These are the two complementary opposite forces. Yang is associated with the energy that is active, which contains qualities of firmness, strength, force, activity, daylight, masculinity and "sunny side of the slope". The Yin means the "shady side of the

slope", and associated with quality of flexibility, receptivity, water, rain, night, emptiness, and femininity [8]. Both the principles are opposing, interacting and interdependent on each other. The Yin and Yang plays important role in keeping our body balanced so any type of imbalance between both of them can lead to the illness and diseases. According to the Chinese traditional medicines the increase or decrease in the Yin and Yang is the cause of the disease so, the goal behind this is not to eliminate Yin and Yang but, to balance both of them. Chi is another fundamental concept of traditional Chinese medicine is Chi which is a flow of energy in the universe. Qi circulates throughout the body along fourteen major channels. These channels are commonly referred to as "meridians" [8]. The meridians make up an intricate and invisible network transporting and directing Qi to every part of the human body. In the body, it is the invisible vital force that creates and animates life. We are all born with inherited amounts of chi, and we also get acquired chi from the food we eat and the air we breathe. The level and quantity of Qi depends on the physical, mental and emotional state of the persons. In the body this is the invisible vital force that creates life. Any type of blockage in the Qi may lead to the diseases or illness.

The five elements: The five elements or a phase consists of the wood, fire, earth, metal, and water. The five elements are interconnected to each other and each element generates or controls the other element .for example, water control fire and earth generates metals .Each organ is interconnected to the five elements [12]. The kidney is associated with water and the heart is associated with fire, and the two organs are related as water and fire are related. If the kidney is weak, then there might be a corresponding fire problem in the heart, so treatment might be made by acupuncture or herbs to cool the heart system and/or increase energy in the kidney system. Based on all the principles the acupuncturist decides the type of treatment to be given to the patients so that within very short span of time the patient should gain their good health back.

Traditional Chinese medicine (TCM) based technique: This type of acupuncture not only involves acupuncture with needles, but also the burning of Chinese medicinal herbs. TCM is

considered to be a holistic approach to medicine since it treats the whole person; not only the body, but also the mind and the spirit. It is based on the concept of Qi (or Chi), which is believed to be a force of energy within the body that keeps the functions of the body, including organs, working properly. The Qi travels along the body on pathways called meridians with each one representing a certain body system or organ function [14]. It is along these pathways that the acupuncturist places needles. The herbs used along with the acupuncture treatment aid in strengthening the body. These herbs can be used to help stop bleeding, fight a cold, and aid in digestion, for just a few examples. Normally, the herbs are used in combinations of three or more and can be taken in pill form, burned and inhaled, or in tinctures placed on the body during treatment.

Acupuncture needles:

Acupuncture, a procedure that invites healing through stimulation of anatomical locations on or in the skin, evolved out of Chinese medicine over 2500 years ago. There are a variety of approaches to diagnosis and treatment in American acupuncture that incorporates medical traditions from China, Japan, Korea, and other countries. The most studied mechanism of stimulation of acupuncture points employs penetration of the skin by thin needles, which are manipulated manually or by electrical stimulation. It is believed that the earliest acupuncture instruments were sharp pieces of bone or flint called *Bian stones*. During the Iron and Bronze ages, metal acupuncture needles began to be developed. Early needles were made from iron, copper, bronze, and even silver and gold [19].

Modern acupuncture needles are made out of stainless steel and come in various lengths and gauges of width. These acupuncture needles consist of a stainless steel shaft, with a handle made out of copper or steel. Some Japanese needles have a color-coded plastic handle. Unlike standard needles used for intramuscular injections, or for drawing blood, acupuncture needles are solid, not hollow, and have a finely tapered point, as opposed to a beveled cutting-edge point. In fact, acupuncture needles are so thin that an acupuncture needle can actually fit within the hollow of a standard blood-drawing

needle [20]. There are nine types of needles used in acupuncture; however, only six are commonly used.

Needles are inserted at points from 15 to 90 degrees in relation to the skin's surface. Once the needle has been inserted there are a variety of techniques that aid in the stimulation and sensation. The technique used by the acupuncturist will depend on the ailment that is being treated. Acupuncture is essentially painless, some people may experience a slight pinch as the needle is inserted. Once inserted, the needles remain in place for approximately 20-30 minutes [21].

A significant development in the acceptance of acupuncture in the United States occurred in March 29, 1996, when the U.S. Food and Drug Administration reclassified acupuncture needles from the Class III, or "investigational" category, to Class IIb, the category that means "safe, effective, but with special restrictions." The change of classification means that needles used for acupuncture will be subject to FDA approval to ensure quality control and "single use only" labeling [4]. Acupuncture needles and other stimuli delivered to acupoints appear to generate afferent action potentials to the spinal cord, which travel to the central nervous system and/or organs. Ultimately, these action potentials lead to the release of neurotransmitters and neuropeptides in nerve terminals. Orthodromic impulses may also trigger efferent impulses to the peripheral nervous system as antidromic action potentials that travel along other branches of the same sensory nerve. Neurogenic inflammation is the result of these antidromic action potentials releasing pro-inflammatory neuropeptides in cutaneous sensory nerve terminals. Acupuncture needles also have the potential to promote healing by causing ionic flow alterations in the lymph, semi conduction along the fascia and connective tissue, and biological and biochemical information to be released in the form of neuropeptides in the lymph and blood [22].

Treatment efficacy:

Acupuncture is an important treatment modality of traditional Chinese medicine involving stimulation of specific points by manually inserting and manipulating fine needles with the

aim of curing disease and/or promoting health. In addition to manual needling, several other methods are used for stimulation of acupuncture points, for example, electrical stimulation, laser, and moxibustion (burning herbal preparations).

Headache: Headache is the common problem associated with both adults and children. Headache is a common health problem, often with an onset in childhood. The NIH Consensus statement identified 16 randomized controlled studies for acupuncture of tension and migraine headaches [12]. In a recent large Swedish study the prevalence of TTH (tension type headaches) and migraine in children and adolescents was 9.8% and 11%, respectively. TTH is essentially defined as bilateral headache of a pressing or tightening quality without a known medical cause [23]. TTH is defined as episodic if it occurs on less than 15 days a month and as chronic if it occurs more often. Migraine typically manifests as attacks of severe, pulsatile, one-sided headaches, often accompanied by nausea, phonophobia or photophobia [24]. There is only one study in children fulfilling the criteria of a randomized controlled trial (RCT). In this study by Pintov and colleagues [25], 22 patients aged 7–15 years with migraine received either true or superficial (in this trial defined as placebo) acupuncture. The results showed that true acupuncture clearly reduced migraine frequency and severity. No such changes were observed in the placebo group. Laser treatment in a prospective, randomized, double-blind, placebo-controlled trial of low level laser acupuncture in 43 children with headache either migraine (22 patients) or tension type headache (21 patients). Patients were randomized to receive a course of 4 treatments over 4 weeks with either active or placebo laser. The treatment was highly individualised based on criteria of Traditional Chinese medicine (TCM) [26]. Laser acupuncture appears to be a safe, non-invasive treatment and therefore especially suitable for children. Second, even a short-term acupuncture treatment with a low level acupuncture laser has good and at least medium-term lasting effects on headache frequency, severity and monthly hours with headache. Third, active laser acupuncture treatment was clearly superior to placebo laser acupuncture treatment [26].

Pain-management: Acupuncture has been accepted for pain relief in most countries and is commonly used in general practice and pain clinics as a complement to conventional treatment. A common feature in many methods used to relieve pain is the activation of somatic afferents seen, for example, in Transcutaneous Electrical Nerve Stimulation (TENS), vibratory stimulation and massage, where receptors or nerve fibres are excited in the stimulated tissue. TENS and acupuncture with manual or electrical stimulation are effective in initiating nerve impulses. Acupuncture excites receptors or nerve fibres in the stimulated tissue which are also physiologically activated by strong muscle contractions, and the effects on certain organ functions are similar to those obtained by protracted exercise. Both exercise and acupuncture produce rhythmic discharges in nerve fibres, and cause the release of endogenous neurotransmitters including opioid, monoamines, oxytocin and other neuropeptides an important in the control of sensory, affective and cognitive elements of pain [27]. A Study found that acupuncture was significantly more effective than placebo-diazepam in the treatment of osteoarthritic pain and as effective as sham acupuncture or diazepam treatment [28]. Electro acupuncture is found more effective in musculoskeletal pain. In this randomized clinical study, patients who received electro acupuncture treatment for 6 weeks showed improved pain threshold, took less medication, and reported better sleep than patients who received sham treatment [29]. Another study comparing standard medical care with standard care plus acupuncture treatment, found that low back pain was medication significantly reduced when acupuncture was given in conjunction with physiotherapy [30]. The efficacy of acupuncture in treatment of paediatric pain has not been as thoroughly evaluated. In one crossover study, 10 patients with sickle cell anaemia received either acupuncture point or sham site treatments during 16 painful crises in 2 extremities. The results of this study showed that pain relief was obtained in 15 of the 16 painful episodes for both acupuncture and sham sites. The conclusion was that needling at either the Sham or acupuncture site is effective at alleviating pain [31].

Postoperative nausea and vomiting: Because of simplicity, low cost, and lack of major side effects, acupressure has been examined in anaesthesia for different types of surgery, with mixed results. It has been found to be effective after laparoscopic cholecystectomy [32], gynaecologic surgery, and caesarean section [33]. A recent meta-analysis concluded that acupressure was better than placebo in adults only at preventing early (less than 6 hours) nausea and vomiting, with equivalent results to commonly used antiemetic drugs [34]. The use of acupuncture to reduce postoperative nausea and vomiting has been well documented compared with sham acupuncture in women undergoing minor gynaecologic procedures [35]. In an adult study on postoperative (laparoscopy) nausea a double-blind randomized controlled study of acupuncture versus placebo, 81 patients were stratified to either receive acupuncture or placebo. After surgery, 65% of placebo versus 35% of acupuncture experienced postoperative nausea, and after discharge 69% of placebo and 31% of acupuncture patients experienced nausea [36].

Cancer: Acupuncture is a common treatment for many painful and non-painful conditions in traditional Chinese medicine [37]. Needle techniques with electrical stimulation of the needles in the patient, has been effective in adult patients undergoing cancer chemotherapy. There is good evidence for the use of acupuncture for low back pain [38], acute dental pain, and recurrent headache and for the prevention of nausea and vomiting associated with chemotherapy [39].

Osteoarthritis: Common and frequently disabling disease among the elderly, there is currently neither any specific nor curative therapy for this condition. Acupuncture is an accepted treatment. For arthritis in Asian countries and osteoarthritis has been recognized by the World Health Organization as an indication for acupuncture treatment [40]. A randomized controlled trial of acupuncture was conducted and a pilot study using validated outcome measures to obtain preliminary data on efficacy and tolerability in 12 patients with symptomatic knee osteoarthritis. These data suggest that traditional Chinese acupuncture may be effective in relieving symptoms and

improving function in patients with knee osteoarthritis [41]. Another study found that acupuncture was significantly more effective than placebo diazepam in the treatment of osteoarthritic pain, and just as effective as sham acupuncture or diazepam treatment [12].

Women's health care: Acupuncture has shown promise in treating many women's health conditions associated with chronic pain. The National Institutes of Health recognizes that acupuncture is effective and particularly suited toward the treatment of fibromyalgia, chronic headaches, primary dysmenorrhea, endometriosis, menopause and pregnancy induced vomiting, and nausea etc [42].

Acupuncture treatment on specific acupuncture points appears to be an effective pain treatment for endometriosis. A study design was conducted on One hundred and one women aged 20–40 years participated and were randomized into two groups, each receiving two units of 10 acupuncture treatments, twice a week over a period of five weeks. Eighty-three out of a total of 101 patients finished the study. Group 1 showed a significant reduction of pain intensity after the first 10 treatments. In comparison, group 2 showed significant pain relief only after the cross-over [43]. The National Center for Complementary and Alternative Medicine (NCCAM) at the National Institutes of Health is currently sponsoring rigorous scientific investigations of acupuncture. Currently, there are two NCCAM-funded trials studying the efficacy of acupuncture in the treatment of fibromyalgia with more extensive and reliable controls [44]. Acupuncture is one of the complementary therapies that are increasingly used by women with menopausal hot flushes. One study showed acupuncture was superior to blunt needle for flash frequency but not intensity. For flushes associated with induced menopause, clearly acupuncture is useful for reducing flushes in clinical practice, but there is mixed evidence on the nature of the effect: one trial found genuine acupuncture superior to control needling, but another showed no significant difference between acupuncture and blunt needle [45]. An irregular menstruation includes many different menstrual conditions in TCM, such as early menstrual cycle, delayed menstrual cycle, irregular menstrual cycle, menorrhagia, scanty

menstruation. TCM has had thousands of years of experience in the treatment of most patterns of irregular menstruation with acupuncture, herbal medicine and other therapies [46].

Asthma: Bronchial asthma, a chronic inflammatory airway disorder characterized by reversible airway obstruction. In 2001, the reported prevalence of asthma in children ranged from 1.6% to 35% worldwide, while that in adult ranged from 4.1% to 32% in Europe [47]. Another review reported the effectiveness of acupuncture on the management of asthma based on 10 randomized controlled clinical trials. Nine of the 10 trials investigated showed positive short-term improvement of lung function and a subsequent decrease in the use of medication [48]. The effects of sham acupuncture and moxibustion, a branch of traditional Chinese medicine, in the management of asthma have been extensively reported over the last few decades [49]. In a similar, single-treatment study with exercise-induced asthma, acupuncture administered 20 minutes prior to exercise reduced asthma attacks significantly more than sham treatment [50].

Dermatology: There are traditional reviews reporting its effectiveness in acute and chronic urticaria, acne, herpes zoster, psoriasis, and atopic dermatitis. There are case reports of acupuncture being effective in the treatment of atopic dermatitis, acne vulgaris, rosacea, pruritus, psoriasis, and discoid lupus erythematosus, systemic lupus erythematosus, erythroderma, herpes zoster, erythema annulare centrifugum, tinea capitis, tinea pedis, seborrheic dermatitis, urticaria, neurodermatitis, verruca vulgaris, alopecia, chloasma, contact dermatitis, scleroderma, ulcers, pityriasis rosea, dyshidrosis eczema, and granuloma annulare [22]. Acupuncture can also promote normalization of autonomic, neuroendocrine, and immune functions, thereby improving the total health and well-being of patients, in addition to treating their skin disease. In a study the 31 cases of urticaria were all up to the diagnostic criteria for urticaria set in Criteria for Diagnosis and Therapeutic Effects of Diseases and Syndromes in TCM, and obtained quite good therapeutic effects. Based on the above-mentioned criteria, the 31 cases all received acupuncture treatment for varying treating time from half a month to 3

months. Comparisons were made between the first visit and the last visit. The results were as follows. Cured: 8 cases (covering 25.8%); improved: 17 cases (covering 54.84%); and failed: 6 cases (covering 19.35%). The total effective rate (cured rate + improved rate) reached 81% [51]. TCM is an alternative method of therapy that can be administered in oral, topical, or injectable forms. For patients, acupuncture has become increasingly popular as a mode for treating dermatologic diseases. Intuitively plausible, the various TCM approaches in treatment are proving beneficial for many chronic inflammatory skin diseases. These approaches are as flexible in use, highly efficient, and safe [52]. Many experimental studies are currently being conducted to determine the cellular and molecular mechanisms of TCM psoriatic treatment modalities being performed [53].

Drug abuse: There is scientific evidence for the use of acupuncture. The acupuncture and research communities presented the best documented evidence for the efficacy of acupuncture to the Office of Alternative Medicine (in NIH) and the FDA. Petitions were presented to the FDA for the use of acupuncture for the treatment of substance abuse. Both clinical research and opinion concerning acupuncture for the treatment of substance dependency is contradictory and controversial. In October 1991, the national institute on drug abuse sponsored a technical review to discuss the efficacy of acupuncture for the treatment of substance abuse. The current status of research and directions for future study were discussed. It was agreed the although potentially useful, studies provided equivocal results because of design, sample size and other factors and that further research was needed. However, acupuncture was a safe, effective, and inexpensive treatment for addictive diseases [54]. Acupuncture treatment has also found successful application in the treatment of chemically dependent prepartum and postpartum women [55], and a variation of the protocol is being used to treat chemically exposed infants... A Review of Available Data Indicates No Clear Evidence That acupuncture Is Effective Compared to Placebo or to Existing Treatments in the Detoxification, Primary Rehabilitation, or Relapse Prevention of Opiate or Cocaine

Dependence [56]. A 1994 review concluded that opiate addicts in detoxification programs receiving acupuncture treatment had better program attendance than those patients receiving sham treatment [57].

AIDS: There is significant evidence for the efficacy of acupuncture for other uses; there is special significance for people with HIV who have been turning to Chinese medicine in increasing numbers throughout the course of the epidemic. Studies have shown that acupuncture can aid people with HIV through alleviation of common symptoms such as fatigue, enlarged lymph nodes, diarrhoea, neuropathy, anorexia and weight loss; and provide an improved sense of well-being and alleviation of drug side effects [58].

Glucoma: Acupuncture may be potentially useful in treating a variety of ocular conditions including dry eye, myopia, paralytic strabismus, retinitis pigmentosa, optic atrophy, iritis, conjunctivitis, and cataracts. In 1999, the American Academy of Ophthalmology task force acknowledged that acupuncture may be useful as an adjunctive therapy or as an acceptable alternative to conventional treatment for certain ocular conditions [59]. In another case series with over 500 acupuncture treatments for various kinds of ocular diseases, especially in cases of retinitis pigmentosa, high myopia, cataracts, surgical aphakia, controlled glaucoma and reattached ablation retinae. And a subset of patients with glaucoma showed remarkable improvement in visual acuity [60]. A clinical study of acupuncture on 18 patients with glaucoma and ocular hypertension indicated that IOP is significantly decreased at 15 minutes as well as at 24 hours after acupuncture [61]. A pilot study was conducted on eleven patients with glaucoma and acupuncture was carried out twice a week over 5 weeks. Intra Ocular Pressure (IOP), visual acuity, and subjective symptoms were observed at 15 minutes before and after acupuncture once a week and in a four-week follow-up. IOP was significantly improved at 15 minutes after acupuncture, at one week, two weeks, and five weeks and tended to be lower weekly. Uncorrected visual acuity was significantly improved at three weeks, four weeks, and five weeks, and best corrected visual acuity was significantly improved at five weeks.

The present study suggests that acupuncture can be used to supplement conventional therapy for glaucoma and other ocular diseases and symptoms without any major adverse effects [62].

Stroke rehabilitation: The US National Institutes of Health (NIH) concluded that acupuncture may serve as a useful adjunct treatment or an acceptable alternative or be included in a comprehensive management program for stroke rehabilitation [63]. Studies have shown that stroke victims who receive acupuncture in addition to their standard treatment show greater recovery from paralysis than those patients receiving only standard therapy [64]. A study examining the long-term effects of acupuncture on stroke recovery found that patients receiving acupuncture treatment showed significantly greater improvements in motor skills functioning both during the treatment [12]. Two hundred and seventy-three individuals completed the questionnaire with the respondent group comprising mainly males (62%) over 65 years of age (68%). Overall 29% had used acupuncture with 16% receiving acupuncture treatment for stroke related conditions. Almost all respondents (98%) wanted to know more about acupuncture in stroke rehabilitation and 87% would consider acupuncture as a treatment option. Few (8%) reported that they had advanced level knowledge about acupuncture, with most reporting a basic (48%) or intermediate (33%) level which recognized that acupuncture used fine needles to produce a therapeutic response. Those with prior acupuncture experience expected to pay more for treatment. This study demonstrates that there is willingness by patients attending conventional hospital-based rehabilitation centers to consider acupuncture in stroke rehabilitation [65].

Weight Loss: Electro acupuncture (EA) results in weight loss in obese people, when it is applied to particular points that are effective for obesity treatment [69]. Another study was carried out to investigate the effect of acupuncture therapy on body weight and on levels of the serum total cholesterol, triglyceride, high-density lipoprotein (HDL) cholesterol and low-density lipoprotein (LDL) cholesterol in obese women and the results suggested that EA application in obese women may decrease the serum total cholesterol,

triglyceride, and LDL cholesterol levels by increasing the serum beta endorphin level. This lipolytic effect of EA may also reduce the morbidity of obesity by mobilizing the energy stores that result in weight reduction [70].

Veterinary care: In 1596, Classic of Internal Medicine was introduced to Japan. Japanese books, Notes on Hippology (1604) and Selected Medical Methods for Treating Diseased Horses (1759), describe the ancient art of Chinese acupuncture and contain acupoint charts. The History of Japanese veterinary acupuncture seems to end in the mid-1880s, when Western medicine was introduced. Acupuncture is being used much more commonly now as a sole or integrative modality in veterinary medicine and can play a large role in management of inflammation and chronic pain. Recent clinical veterinary studies demonstrate effectiveness in many areas. A case report describes significant improvement in a dog with Horner's syndrome [66]. A study somewhat astounding to the Western practitioner describes electro acupuncture as the sole analgesic needed for bovine surgery [67]. Laser-emitting diode devices can be used to stimulate acupuncture points. Using low-power (5-30 mW) energy of wavelengths 630 to 960 nm is common in veterinary medicine. Laser has been shown to be analgesic and anti-inflammatory [68].

Ayurveda:

Ayurveda is the most ancient system of Indian medicine practiced by approximately 300000 physician. In this concept disease occurs due to imbalance of three elements or *doshas* of body called *vata*, *pitta* and *kapha* and nature of food and herbs taken which are again divided into *Virya*, *Rasa*, and *Vipaka*. Herbal treatment includes herbal medicine, Ayurvedic message and vedic astrology. Ayurvedic medicine includes aromatherapy and diet and nutrition. Oils, gems, colors are part of ayurvedic system to cure many diseases [6]. Yoga is part of Ayurvedic medicine.

YOGA

When the body and mind are constantly overworked, their efficiency in performing their duties diminishes. Modern social life, food, work and even play make it difficult for the modern

man to use a proper relaxation technique for rejuvenation. An observance of nature will show us that animals love relaxation and sleep. They get as much sleep as they want. Rest and sleep are essential to recharge our nervous energy as our physical, emotional and mental balance depends on the quantity and quality of these vital necessities. They are the only things that recharge these batteries and allow for the proper elimination of metabolic wastes.

History and origin:

Two millennia ago, the Indian sage, Patanjali, systemized yoga in the Yoga-Sutra. The Yoga Sutras are a compilation of Yogic thought that is largely Raja Yogic in nature, it was codified sometime between the 2nd century BC and the 3rd century, and prescribes adherence to "eight limbs" (the sum of which constitute "Ashtanga Yoga") to quiet one's mind and merge with the infinite. Patanjali described yoga as consisting of eight interconnected limbs, or aspects of the whole, that lead progressively to higher stages of health and awareness [71].

- Yama (moral codes); not harming, truthfulness, not stealing, chastity, and not being acquisitive.
- Niyama (self-purification and study); cleanliness of mind and body, contentment, intense discipline, self-study, and dedication to the Infinite.
- Asana (posture); cultivation of profound physical steadiness and effortless, so body and mind move in harmony and all dualities of mind cease.
- Pranayama (breath control); sustained observation and refinement of all aspects of breathing, so as to control and channel life force (*prana*) in the breath.
- Pratyahara (sense control); withdrawal of the senses from the external world into the interior self.
- Dharana (concentration); locking attention on a single object or field, such as the breath.
- Meditation; profound state of quiet and relaxation.

Treatment efficacy of yoga:

Now days, many forms of yoga are practiced which include hatha, ashtanga, anasara, lyengar and Bikram. Hatha means sun and moon, in this practice a relaxing, restorative, forms are done. Ashtanga is a series of poses which is also known as power yoga. Anusara is a slow and free flowing movement. Lyengar is holding poses and strenuous positions. Bikram is a yoga practiced in a high temperature room [72]. Studies have shown that yoga can improve several conditions such as anxiety, depression, pain syndromes, sleep, headaches, lower back pain, osteoarthritis, rheumatoid arthritis, epilepsy, cardiovascular disease, asthma, diabetes, obesity, pregnancy conditions and menopause.

Anxiety: Several studies have focused on anxiety. A Study was undergone in which randomized comparative trial was undertaken in patients with schizophrenia to evaluate changes in state anxiety, psychological stress and subjective well-being after single sessions of yoga and aerobic exercise compared with a control condition. Forty participants performed a single 30-min yoga session, 20-min of aerobic exercise on a bicycle ergometre at self-selected intensity and a 20-min no exercise control condition in random order. After single sessions of yoga and aerobic exercise individuals with schizophrenia or schizoaffective disorder showed significantly decreased state anxiety, decreased psychological stress and increased subjective well-being compared to a no exercise control condition [73]. In a study focused on anxiety, females who perceived themselves as emotionally distressed attended two weekly 90 min yoga sessions. Those who participated in yoga training showed decreased stress and anxiety [74]. The individuals suffering from headache or back pain reported reduced pain and have also been noted on anxiety [75].

Depression: Yoga is very useful in elevating depression. In one study, weekly yoga sessions led to increased alpha waves which are a sign of increased relaxation and decreased cortisol [76]. One study showed that yoga can be used as a treatment for Obsessive Compulsive Disorder (OCD), so that, when used as an adjuvant to drugs, yoga led to better improvement of symptoms [77]. 13 psychiatric patients at New

Hampshire Hospital and reported a significant improvement in anxiety, depression, anger, fatigue confusion of patients as a result of yoga practices [78]. In a study Participants were randomly assigned into an experimental and a control group. The experimental group participated in twice weekly yoga classes of 90 min duration for two months. Participation in a two-month yoga class can lead to significant reduction in perceived levels of depression [79].

Sleep: A sample of pregnant women who began prenatal hatha yoga during the second trimester had fewer awakenings, less awake-time during the night and less perceived sleep disturbance. Those who began yoga during the third trimester ironically had poorer sleep overtime [80]. In another study when quit sleep increased, based on activity watch monitors, both substance P and pain decreased [81].

Headache: Individuals with migraine headaches were randomly assigned to yoga or self-care group [82]. After three months of weekly session the intensity and frequency of headaches ratings, the anxiety and depression scores and medication use were lower in yoga versus self-efficacy.

Osteoarthritis: Adults with osteoarthritis of hands were assigned to yoga. After once weekly sessions for 8 weeks, yoga group had less pain during activity [83]. In this study the participants generally practice lyengar yoga poses for 90 min once weekly for 8 weeks. After due course of time the participants experienced less pain and there health improved.

Rheumatoid arthritis: A Study was undergone to measure the effects of an 8 week, bi-weekly Raj yoga program on diseases activity, disability and quality of life indices in RA patients as compared with controls. The yoga program was run in sessions of 10 patients each, by a licensed practitioner with a Master's qualification in Yoga and Ayurveda. The exercises were decided on in conjunction with the Rheumatologists and also with the yoga videos. Patients were required to complete 12 sessions of yoga and also were required to be able to do at least 80% of the prescribed exercises. A pilot study of 12 sessions of yoga for RA was able to demonstrate statistically significant improvements in RA disease parameters. Some patients in the yoga

group were able to decrease or discontinue RA medications [84]. A Study has shown that patients with rheumatoid arthritis (RA) in the UAE have delayed diagnosis and low disease modifying drug (DMARD) utilization. A total of 200 patients were seen over a 2-month period at two centres. The majority of the patients at two centres in the UAE had very active disease; there was a delay in diagnosis and delay to starting first DMARD [85].

Cardiovascular conditions: Patients with coronary artery disease have also benefited from yoga. At the end of one year of yoga training cholesterol was reduced by 23% in the yoga group as compared to 4% in standard treatment group. Serum low density lipids also decreased more in yoga group [72]. Heart failure is a multisystem syndrome with the autonomic neurohormonal abnormalities of increasing sympathetic and decreasing parasympathetic activity. In a study, Stable Heart Failure patients were recruited and completed 8-weeks of yoga classes. The safety (cardiac and orthopaedic adverse events), physical function (strength, balance, endurance, flexibility), and psychological function (quality of life, depression scores, mindfulness) etc were assessed before and after 8 weeks of yoga classes. Yoga practice was safe, with participants experiencing improved physical function and symptom stability [86]. Other researchers studied effects of an 8-week yoga program on inflammatory markers in patients with HF and found both improvements in exercise tolerance and inflammatory markers such as interleukin-6, high-sensitivity C-reactive protein, and extracellular Superoxide dismutase [87]. A study was undergone in which the immediate effect of a combined form of Tai chi/yoga was studied. 38 adults participated in a 20-min Tai chi/yoga class. The session was comprised of standing Tai chi movements, balancing poses and a short Tai chi form and 10 min of standing, sitting and lying down yoga poses. Heart rate increased during the session, as would be expected for this moderate-intensity exercise. Changes from pre to post-session assessments suggested increased relaxation including decreased anxiety and a trend for increased EEG theta activity [88]. In a study the men were randomly assigned to yoga group or a control group. The yoga group practiced 45 min of yoga daily for three months

while the control group performed regular exercise for three months. The men in yoga group showed greater decrease in heart rate and blood pressure [72].

Epilepsy: A study was undergone in which total of 32 patients were recruited 10 to Sahaja yoga (group I) and 22 to control treatments which included 10 on exercise mimicking Sahaja yoga (group II) and 12 on no additional interventions (group III). Antiepileptic drugs (AEDs) were continued in all. Four patients in the yoga group were seizure free for 6 months, compared to none in the control groups. Nine patients in the yoga group had more than 50% reduction in seizure frequency compared to only one among the 22 controls. Seven patients in the yoga group had more than 50% reduction in seizure duration compared to none among the controls. There was also a decline in the average number of attacks per month compared to the baseline frequency among the patients treated with yoga [89].

Obesity: Yoga and meditation are the main adjunct to weight loss. A study was undergone in which stress is controlled to reduce the weight. So, stress management is an important component of weight management. Meditation practice has clinical effects. These include a broad spectrum of occurrences such as reduced anxiety, pain, depression, and stress along with enhanced mood and self-esteem. The literature also supports yoga as an effective strategy for managing stress. Yoga and breath-based meditation, with their elements of cognitive discernment and provision of physical context for emotional work, may provide useful tools to facilitate transitions to healthier lifestyles. These practices may facilitate mindfulness during mealtimes, awareness of portions sizes, changes in eating speed and overall health-sustaining choices [90].

Asthma: In a study on asthma, a yoga group and control group who received education about asthma attended 2 hours of session once a week for four months. By the end of the treatment period and again a 2 months of follow up assessment asthma related symptoms were cured [91].

Pregnancy conditions: In one study physical postures, breathing and meditation were

practiced by pregnant women 1 hour daily from early in second trimester until delivery for the cure of hypertension and preterm labour. A good result was obtained by doing yoga [92]. A study examined the effects of a yoga program during pregnancy, on maternal comfort, labor pain, and birth outcomes. A randomized trial was conducted using 74-primigravid Thai women who were equally divided into two groups (experimental and control) [93]. The yoga program involved six, 1-h sessions at prescribed weeks of gestation. A variety of instruments were used to assess maternal comfort, labor pain and birth outcomes. The experimental group was found to have higher levels of maternal comfort during labor and 2 h post-labor, and experienced less subject evaluated labor pain than the control group. In each group, pain increased and maternal comfort decreased as labor progressed. No differences were found, between the groups, regarding pethidine usage, labor augmentation or newborn Apgar scores at 1 and 5 min. The experimental group was found to have a shorter duration of the first stage of labor, as well as the total time of labor.

Menopause: In a case study six participants completed the study. All participants were experiencing menopausal symptoms at the start of the study. The Iyengar yoga program was led by a registered yoga practitioner, the program was held two evenings per week. For eight weeks. In addition to the biweekly classes, participants were also instructed in a home exercise program. The participants kept journals to track their home exercise program. Five of six participants had a decrease in menopausal symptoms and an increase in QOL (quality of life). Flexibility improved in four of five participants with the sit and reach test [94].

HOMOEOPATHY

Homeopathy:

Homeopathy is a new field of medicinal system which follows the rule of similar, “like cures like” which is evident from Greek origin of its name. Nevertheless, the homeopathic approach to health was first described by Hippocrates 2,500 years ago, Homeopathy came to existence by the German physician Samuel Hahnemann. In India, it was first introduced in Kolkata.

Origin and history:

The principle of Homoeopathy has been known since the time of Hippocrates from Greece, the founder of medicine, around 450 B.C. Homoeopathy as it is practiced today was evolved by the German physician, Dr. Samuel Hahnemann (1755–1843) who was regarded as the founding father of homeopathy. He believed that disease must be studied from the viewpoint of ‘Vitality’. The word ‘Homoeopathy’ is derived from two Greek words, ‘Homois’ meaning similar and ‘pathos’ meaning suffering. Homoeopathy simply means treating diseases with remedies, which are capable of producing symptoms similar to the disease when taken by healthy people [5]. Hahnemann believed we have a vital energy keeping the body alive and healthy, unless it is disturbed in some way, disturbance manifesting itself as physical, emotional or mental problems. In 1810 he wrote Organon of the Rational Art of Healing. He worked with the understanding of using vibrations.

Homeopathy was introduced in India the early 19th century. It flourished in Bengal at first, and then spread all over India. In the beginning, the system was extensively practised by amateurs in the civil and military services and others. Mahendra Lal Sircar was the first Indian who became a homeopathic physician. A number of allopathic doctors started homeopathic practice following Sircar’s lead. The ‘Calcutta Homeopathic Medical College’, the first homeopathic medical college was established in 1881. This institution took on a major role in popularising homeopathy in India.

On 23 May 1969, the government of India formed the Central Council for Research in Indian Medicine and Homeopathy and Yoga. In 1970, under the advice of K.G. Saxena, the then honourable advisor on homeopathy, the central government decided to found the Central Homeopathic Research Institute. The first homeopathic research institute in India, which was also the first in Asia, was established in Howrah, West Bengal. In November 1995, the department of AYUSH was formed. The department is working constantly for up gradation of AYUSH educational standards, quality control and standardisation of drugs. It is also working on improving the availability of

medicinal plant material, research and development and awareness generation about the efficacy of the systems domestically and internationally [95].

Treatment efficacy:

The organotropic use of homeopathic medicines is historically associated with the use of mother tinctures or low potencies. Organotherapy is a 'simplified' type of homeopathy where the level of Similarity is lower and small frequently repeated, material doses are used. Homeopathy is the most frequently used complementary and alternative medicine (CAM) therapy in five out of 14 European countries included in a survey published by the Norwegian Government and among the three most frequently used in 11 out of 14 countries. Between 20 and 25% of all European Union citizens use homeopathic medicines [96]. Homeopathic medicines are prescribed to assist the body's own healing mechanisms to rid itself of disease. Now a day's, homeopathy is used to improve the various conditions anxiety, depression, insomnia, diabetic polyneuropathy, dermatitis, headache, migraine, trigeminal neuralgia, respiratory infections, rheumatic disease, menstrual irregularities, paediatric, and in veterinary practices.

Anxiety: The term anxiety disorders is used as an umbrella term for a number of conditions including Panic disorder, phobias, obsessive-compulsive disorder, generalised anxiety, post-traumatic stress disorder and anxiety disorder due to a general medical condition. Severe anxiety can affect the individual's ability to carry out the activities of normal life and in individuals with generalised anxiety disorder; symptoms may last for months and recur regularly, and are often worsened by stressful events [97]. In a study, eight randomised controlled studies were identified. The types of anxiety and anxiety disorders studied were test anxiety, generalised anxiety disorder and anxiety related to medical or physical conditions such as cancer or surgical procedures. Adverse effects reported appear limited to 'remedy reactions' and included temporary worsening of symptoms and reappearance of old symptoms [97]. Bonne and colleagues reported no significant difference between adults with generalised anxiety disorder treated with individualised remedies and those

treated with placebo for 10 weeks. In fact, a significant improvement was observed in both the active and placebo groups, including reduction in Hamilton Rating Scale for Anxiety (HAM-A) scores, over the period of the study [98].

Depression: Depression refers to a wide range of mental health problems characterised by the absence of a positive affect, low mood and a range of associated emotional, cognitive, physical and behavioural symptoms.

Davidson and colleagues reported homeopathic treatment of 12 patients with a range of diagnoses related to depression and anxiety disorders. Full psychiatric diagnostic assessment together with a comprehensive homeopathic interview took place followed by individualised prescribing of the homeopathic treatment. Seven of patients were reported to have responded to homeopathic treatment, on the basis of the Clinical Global Improvement (CGI) scale, including 2 of the 3 patients with major depression [99].

In a study, clinical trial of individualised homeopathy for symptoms of oestrogen withdrawal in 45 breast cancer patients were carried out, a significant improvement in depression score was found among women with depression, but not of the group overall. Twenty-six of the patients had also been included in the 2002 study. Eighty-nine percent of patients completed this study and again satisfaction with treatment was high; 67% regarded homeopathic treatment as having been helpful, very helpful or extremely helpful for their symptoms [100].

Insomnia: Insomnia is a disturbance of normal sleep patterns commonly characterised by difficulty in initiating or maintaining sleep. In a case study, 5 patients with sleep disorders related to alcohol dependency were studied. 5 patients were given homeopathy treatment for three months. After completion of study, improvements on all measures of sleep quality and measures of alcohol dependence were observed. 2 patients had marked improvements, 2 slight improvements and 1 no change [101].

Carlini *et al.* assessed 44 patients with severe insomnia, who had a course of seven appointments with a homeopath. Patients

received either individualised homeopathic remedies for 45 days followed by placebo for 45 days or vice versa. Of the 26 patients who had full follow-up data, no consistent difference was observed between patients starting on homeopathic remedies or placebo, although analysis was complicated by the crossover design and the fact that all patients received a course of treatment by a homeopath. Both groups showed statistically significant improvements from baseline by day 15 [102].

Migraine: In a study, the efficacy of homeopathy in preventing migraine attacks and accompanying symptoms, a randomised, double-blind, placebo-controlled clinical trial was conducted. There was a one-month registration period without treatment, followed by four months individualised homeopathic treatment or identical placebo. Patients were stratified for common or classical migraine. Seventy-three patients were randomised, 68 completed the trial. Baseline values were similar in the two groups. Both the homeopathy and placebo groups had reduction in attack frequency, pain intensity and drug consumption, with a statistically non-significant difference favouring homeopathy. Migraine diaries showed no difference between groups. A significant reduction in attack frequency in the homeopathy group was observed [103].

Trigeminal neuralgia: Trigeminal neuralgia (TN) is a chronic pain with paroxysmal and radiating presentation. TN is often unilateral and has trigger zone in the involved area. TN Patients often describe the pain attack as a ‘red hot needle’ or ‘forked lightning’ pain in their face. In a study, 15 patients with physician-confirmed trigeminal neuralgia were treated with homeopathy. Patients received individualized homeopathic medicines as oral liquid 30C once per month and were followed-up at the end of first, second, third and fourth month. Visual analogue scale (VAS) was used for the evaluation of pain intensity and descriptive criteria were used for evaluation of attack frequency. All 15 patients completed treatment. The results for both the reduction of pain intensity and attack frequency were statistically significant during the four month evaluation. The observation is reduction of more than 60% in

pain intensity using homeopathic treatment [104].

Dermatitis: Atopic dermatitis (AD) is one of the most common chronic skin diseases. It affects infants and children and is increasingly persisting into adulthood. In a study the efficacy of homeopathic treatment of intractable atopic dermatitis (IAD) has been evaluated. Seventeen IAD patients were given individualized homeopathic treatment in addition to conventional dermatological therapy from 6 months to 2 years and 7 months. Although all of the patients had previously been treated with conventional medicine and various psychological approaches, they had had severe conditions and shown no significant sign of improvement. The efficacy of homeopathic treatment was measured by objective assessments of the skin condition and the patients’ own assessments, using a 9 point scale similar to the Glasgow Homeopathic Outcome Scale, was used. Over 50% improvement was reported in overall impression and in their skin conditions by all patients, in itchiness by 15 of the patients, in sleep disturbance by 10 out of 13 patients, in satisfaction in daily life by nine out of 12, in fulfilment at work by seven out of 11 and in satisfaction with human relations by 10 out of 14 [105].

Women’s health: In a study, the usefulness of homeopathic treatment in the care of menstrual irregularities was evaluated. 18 consecutive cases of secondary amenorrhea (SA) and oligomenorrhea (OL) met the entry criteria. 8 women had SA, 2 were on HRT, 6 had OL-AM and 2 had OL. The average duration of considered follow-up was 21 months. The average time before the reappearance of menstruation was 58 days in the 8 women with SA at the time of the first appointment, for all cases 46 days. 50% of women, who were diagnosed Amenorrhea (AM), recovered their ovulatory cycle (OV), whereas 12.5% remained amenorrheic; 33.3% of patients, who were initially OL-AM, showed an OV; 100% of oligomenorrhoeas and HRT patients recovered an Ovulatory cycle [106].

A survey published in the Journal of Nurse-Midwifery found that 64% of certified Nurse-midwives who prescribe herbal medicines use

blue cohosh to induce labor. Some research has been done on the active botanical constituents in herbal preparations of these plants, which may affect the initiation of labor. The active constituents in blue cohosh are caulosaponin and caulophyllosaponin- glycosides that are thought to activate smooth muscle contraction and to specifically stimulate uterine contractions [107]. Two studies by Vahrtian et al, found that for certain subpopulations of women, the risks associated with induction may be greater than the risks associated with expectant management. Nulliparous women who undergo elective induction are more than twice more likely to have an operative delivery than nulliparous women who enter labor spontaneously [108]. Similarly, Vahrtian et al, compared outcomes of 329 women at term who were induced with the outcomes of 1771 women at term in spontaneous labor, and found that nulliparous women electively induced with cervical ripening were 2 to 3 times more likely to have a caesarean delivery than those with spontaneous onset of labor [108].

Cancer: Homeopathy is used mainly to strengthen the body in its fight against cancer, to improve general well-being, and to alleviate pain resulting from disease or conventional treatments. Balzarini et al; investigated the effectiveness of homeopathic treatment for skin reactions during radiotherapy for breast cancer treatment. Patients were randomised into two groups receiving homeopathic remedies or placebo. Both groups also received a topical medication containing fluocortolone. Homeopathic treatment consisted of three granules of Belladonna twice a day and X-ray once a day. The main outcomes measured in this study were: erythema; skin heat; cutaneous and subcutaneous oedema; and hyperpigmentation. Patient's treated with homeopathy appeared to experience transient benefits. Less hyperpigmentation and decrease of skin heat were observed although these differences were no longer significant by the end of the 10-week follow up. Total severity score was positive in favour of homeopathic treatment during radiotherapy and recovery, but statistical significance for the difference was noticed only during recovery [109]. Thompson and co-workers; conducted a double-blind Randomized Clinical Trials to evaluate the effect of

homeopathy in 53 breast cancer survivors affected by oestrogen withdrawal symptoms. There were no differences between the groups for any other secondary outcomes measured at final follow up. Adverse events were experienced by approximately one quarter of women in both groups and no significant difference was observed between active remedy and placebo group [110].

Veterinary care: Twelve Faculty of Homeopathy veterinarians recorded data systematically at 777 consecutive homeopathic appointments for horses over a period of 12 months. Data from 289 horses comprised a total of 305 individual conditions identified as chronic in nature, of which 234 had a follow-up assessment. At the final appointment for chronic cases during the study period, 4.3 per cent were receiving conventional medication and 17.1 per cent were being given another CAM treatment in addition to homeopathy. The eight chronic conditions most frequently treated with homeopathy were: arthritis, headshaking, laminitis, chronic obstructive pulmonary disease, sweet itch, dermatitis, sarcoidosis and Cushing's syndrome [111]. Data from 400 cats comprised a total of 372 individual chronic problems. Data from 1504 dogs comprised a total of 1408 individual chronic problems. In both species, 22% of FUs in chronic cases received conventional medicines concurrently. In cats, 117 different chronic medical conditions in total were treated with homeopathy. Five of those conditions included were: dermatitis, renal failure, arthritis, and hyperthyroidism. In dogs, of 301 different chronic medical conditions treated in total, those most commonly recorded were: dermatitis, arthritis, pyoderma, colitis, fear, epilepsy, otitis externa, diarrhea, urinary incontinence, aggression, spondylosis, and lymphoma [112].

CONCLUSION

Indian society is a conglomeration of socio-cultural, ethnic, religious, and political mix. The bonding heritage lies mainly in strong religious and familial conceptions that too ethnically evolved through generations of wisdom and experience. Unity in diversity is the seed of Indian civilization and it is deep-rooted in rural en-mass. Traditional rural society now facing a steep challenge from westernized modern urban

and is in a process of dynamic equilibrium. Conception of traditional health care through *Ayurveda*, *Siddha*, *Homeopathy* and other naturopathies are still been widely accepted but the traditional faith is deterred. Health level village workers/ practitioners are not getting adequate lights in the tunnel due to lacuna in infrastructures and they need to be revived considering the socio-economic, socio-cultural, and traditional heritage in India and the East. The review focuses on different aspects of these naturopathies and their effects in curative and preventive aspects in Indian society.

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